DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on 8/15/08 is acknowledged.

2. Claims 37-56 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected Groups II and III, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/15/08.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Response to Amendment

4. The Preliminary Amendments to the claims, in the submission dated 1/20/06, are acknowledged and accepted.

Drawings

5. The drawings were received on 1/20/06. These drawings are accepted.

Specification

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The abstract of the disclosure is objected to because the length exceeds 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson (6,310,671) in view of Carlson et al. (6,141,149).

Consider claims 1 and 31, Larson discloses (e.g. figure 3d) a reflective polarizer comprising: plural birefringent bodies (52, birefringent polymer fiber) each having one of a polygonal prism and a circular cylinder whose cross section perpendicular to a major axis direction thereof has a shape of a polygon or substantially circular (substantially circular), the shape of the cross section having an aspect ratio of not less than 2 (the fibers can have an extended length), and the birefringent bodies having a refractive index difference between a refractive index component in the long axis direction and a refractive index component in a minor axis direction of the birefringent bodies, wherein the plural birefringent bodies are dispersedly arranged substantially in one direction in a support medium (51, polymer matrix), and wherein the shape of the cross section perpendicular to the major axis direction of the birefringent bodies is substantially

circular, in the cross section, any one of the plural birefringent bodies is in contact on a side face thereof with each of at least two other birefringent bodies in contact on a side face thereof with each other (each birefringent body is in contact with a plurality of other birefringent bodies) [col. 7, lines 1-7, col. 8, lines 41-57]. However, Larson does not disclose that the refractive index difference is not less than 0.05. Larson and Carlson et al. are related as reflective polarizing devices. Carlson et al. teach (e.g. figures 1-2) a refractive index of not less than 0.05 [col. 7, lines 1-30]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the device of Larson, as taught by Carlson et al., in order to create polarizers with consistent and high quality performance.

10. Claims 30 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson (6,310,671) in view of Carlson et al. (6,141,149) as applied to claim 1 above, and further in view of Kumazawa et al. (2003/0031846).

Consider claims 30 and 32, the modified Larson reference discloses (e.g. figure 3d of Larson) a reflective polarizer wherein the birefringent bodies (52, birefringent polymer fibers) are made of fibers [col. 8, lines 41-57 of Larson]. However, the modified Larson reference does not disclose that the shape of a cross section of each of the fibers perpendicular to the main axis direction thereof is polygonal. Larson, Carlson et al. and Kumazawa et al. are related as reflective devices. Kumazawa et al. teach (e.g. figures 10-12D) a fiber (3, fine structure) with a polygonal cross section in a direction perpendicular to the major axis direction [0097-0099]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the

device of the modified Larson reference, as taught by Kumazawa et al. in order to obtain a desired reflection spectrum of diffracted and scattered light.

Consider claims 33-35, the modified Larson reference discloses (e.g. figure 12F of Kumazawa et al.) a reflective polarizer wherein each of the fibers (52, birefringent polymer fibers) has a sectional shape of a regular triangle (3, fine structure), wherein the fibers are arranged such that the fibers are substantially parallel in a plane and that apexes of sectional triangular fibers adjacent to each other are in contact with each other, and wherein, in a cross section of the reflective polarizer perpendicular to the major axis, the support medium surrounded by fibers of sectional triangles with apexes in contact with each other is of a hexagon (the fibers can be arranged with sufficient regularity, the triangular shape of the fibers would result in a hexagonal shape of the support medium) [0097-0100 of Kumazawa et al., col. 8, lines 41-57 of Larson].

Consider claim 36, the modified Larson reference discloses (e.g. figure 12B of Kumazawa et al.) a reflective polarizer wherein each of the fibers (52, birefringent polymer fibers) has a sectional shape of a quadrangle (3, fine structure) and lengths of four sides of the quadrangle are substantially equal to each other, wherein the fibers are arranged such that the fibers are substantially parallel in a plane and that apexes of sectional triangular fibers adjacent to each other are in contact with each other, and wherein, in a cross section of the reflective polarizer perpendicular to the major axis, the support medium surrounded by fibers of sectional quadrangles with apexes in contact with each other is a quadrangle and lengths of four sides of the quadrangle are substantially equal to each other (the fibers can be arranged with sufficient regularity,

the quadrangular shape of the fibers would result in a quadrangle shape of the support medium) [0097-0100 of Kumazawa et al., col. 8, lines 41-57 of Larson].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JADE CALLAWAY whose telephone number is (571)272-8199. The examiner can normally be reached on Monday to Friday 7:00 am - 4:30 pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JRC
/Jade R. Callaway/
Examiner, Art Unit 2872

/Arnel C. Lavarias/
Primary Examiner, Art Unit 2872